Production - Natural Gas STAR Annual Report - 2007

Company Information

Company Name: **El Paso E & P Company, L.P.**

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IM wants to report all reductions annually - no rollups.

Company Information Updated: No

Activities Reported

BMP1: Yes BMP2: Yes BMP3: Yes

Total Methane Emission Reductions Reported This Year: 11,762,374

Previous Years' Activities Reported: **No**

Period Covered by Report

From: **01/01/2007** To: **12/31/2007**

Total excluding activity not applicable to Gas STAR = 8,861,374 mcf

Additional Comments

Report received - 6/11/08
Entered into Accers - 6/26/08 - DH
Entered into ISTAR - 7/10/08 - DH
QA/QC - 7/14/08 DF

BMP1: Identify and Replace High-Bleed Pneumatic Devices

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Facility Summary

Number of devices replaced this reporting period: **478 devices**
Percent of system now equipped with low/no-bleed units: _____ **%**

C. Cost Summary

Estimated cost per replacement (including equipment and labor): **$** _____

D. Methane Emissions Reduction

Method Used: **Other**
Data Source: **Not Applicable**
Methane Emissions Reduction: **349 Mcf/year** ✓

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year: Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration (BMP 1 has a sunset period of 7 years).

✓ Partner will report this activity annually up to allowed sunset date.

F. Total Value of Gas Saved

Value of Gas Saved: **$ 2,443**
$ / Mcf used: **$ 7.00**

G. Planned Future Activities

Number of high-bleed devices to be replicated next year: _____ **devices**

Previous Years' Activities

Year	Number of Devices	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of replacements (including equipment and labor)

Additional Comments

BMP2: Install Flash Tank Separators on Glycol Dehydrators

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Facility Summary

Number of flash tank separators installed this reporting period: **20 separators** ✓
Percent of dehydrators in system equipped with flash tank separators: **50 %**

C. Cost Summary

Estimated cost per flash tank separator replacement (including equipment and labor): **$** _____

D. Methane Emissions Reduction

Method Used: **Standard Calculation**
Data Source:
Methane Emissions Reduction: **14,191 Mcf/year** ✓

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration (BMP 2 has a sunset period of 7 years).

✓ Partner will report this activity annually up to allowed sunset date.

F. Total Value of Gas Saved

Value of Gas Saved: **$ 99,337** ✓
$ / Mcf used: **$7.00**

G. Planned Future Activities

Number of flash tank separators to be installed next year: _____ **separators**

Previous Years' Activities

Year	# Separators Installed	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of replacements (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Texas Gulf Coast Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Artificial lift: gas lift (10 years)

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of gas lift valves installed in the wellbore. Gas is injected in the annulus and bubbled up the production string causing a lowering of the hydrostatic pressure. This allows the well to remain unloaded without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **28 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **262,080 Mcf/year** ✓

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 1,834,560**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue to use gas lift wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Gulf of Mexico Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Artificial lift: gas lift (10 years)

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of gas lift valves installed in the wellbore. Gas is injected in the annulus and bubbled up the production string causing a lowering of the hydrostatic pressure. This allows the well to remain unloaded without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **53 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **446,500 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved

Value of Gas Saved: **$ 3,125,500**

$ / Mcf used: **$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **El Paso expects to continue to use gas lifts wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Artificial lift: gas lift (10 years)

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of gas lift valves installed in the wellbore. Gas is injected in the annulus and bubbled up the production string causing a lowering of the hydrostatic pressure. This allows the well to remain unloaded without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **52 units** ✓

D. Methane Emissions Reduction

Methane Emissions Reduction: **486,720 Mcf/year** ✓

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved

Value of Gas Saved: **$ 3,407,040**

$ / Mcf used: **$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **El Paso E & P Intends to continue to use gas lifts wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Gulf of Mexico Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Convert gas pneumatic controls to instrument air (10 years)

Please describe how your company implemented this PRO:

These platforms use diesel and natural gas air compressors to produce compressed air for both instruments and chemical pumps.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **3,012,000 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

✓ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved

Value of Gas Saved: **$ 21,084,000** ✓

$ / Mcf used: **$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **We will report these redcutions for each year that the platform is operated by El Paso** ✓

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

Note that these data inlcude two PROs (convert instruments to instrument air and convert gas operated pumps to air operated pumps).

↓ Contact JM to see if he knows the breakdown.

↓ Did not know breakdown, but added note in STAR.

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

DI&M: survey and repair leaks

Please describe how your company implemented this PRO:

Since 2004, El Paso E & P has implemented a program to proactively identify and repair leaks in the natural gas gathering system in one of our western production fields with long gathering lines. Estimates of the gas that would be released if repairs were not completed are compiled monthly.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **128,280 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 897,960**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P expects to continue this leak detection and repair program on a monthly basis.**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information: - Not counted by Gas STAR

Coal Bed Methane

B. Description of PRO

Please specify the technology or practice that was implemented:

Extraction of gas from active coal mine

Please describe how your company implemented this PRO:

El Paso E & P Company, L.P. (El Paso) operates a coal bed methane program in conjunction with an active coal mine. This coal bed methane program represents a reportable Gas STAR emission reduction because:

1.The methane gas is extracted from a coal seam that is actively mined. Only the production from those wells placed within the approved mine plan is reported here.
2.The wells are drilled by El Paso, all production activity is performed by El Paso, and all production equipment is owned by El Paso or rented directly by El Paso.
3.The methane gas extracted is owned by El Paso.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **2,901,000 Mcf/year**

Basis for the emissions reduction estimate: **Actual field measurement**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved

Value of Gas Saved: **$ 20,307,000**

$ / Mcf used: **$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **This activity is expected to continue to operate in 2008 and 2009.**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

The natural gas would have to be vented to the atmosphere by the mine if it were not extracted by El Paso.

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Texas Gulf Coast Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Green completions

Please describe how your company implemented this PRO:

Implemented practice of never venting gas to the atmosphere during after frac flowing periods. As soon as the well gasses out, it is turned to sales if a sales line is present. If no sales line is completed, the well is flared to a flare stack.

C. Level of Implementation

Number of units installed: **65 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **487,500 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

✓ One-year Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): **$** _____

G. Total Value of Gas Saved

Value of Gas Saved: **$ 3,412,500**

$ / Mcf used: **$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to cointinue to use green completion techniques where feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Texas Gulf Coast Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Green Recompletions on Lower Volume Wells

Please describe how your company implemented this PRO:

Implemented practice of never venting gas to the atmosphere during after frac flowing periods. As soon as the well gasses out, it is turned to sales if a sales line is present. If no sales line is completed, the well is flared to a flare stack.

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **204,000 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

✓ One-year Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 1,428,000**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue to use green recompletions wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Western Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install electric compressors (10 years)

Please describe how your company implemented this PRO:

El Paso has installed 21 electric drive compressors at an active production field in the Western Onshore Division

C. Level of Implementation

Number of units installed: **21 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **60,346 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 422,422**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue to use electric compressors wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Gulf of Mexico Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install electric motors (10 years) ✓

Please describe how your company implemented this PRO:

El Paso has installed small solar powered air compressors on small single well platforms (i.e. single caissons)

C. Level of Implementation ✓

Number of units installed: **2 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **2,640 Mcf/year** ✓

Basis for the emissions reduction estimate: **Calculation using manufacturer specifications**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved

Value of Gas Saved: **$ 18,480**

$ / Mcf used: **$ 7.00**

H. Planned Future Activities

To what extent do you expect to implement this PRO next year?: **El Paso expects to continue to use these solar powered compressors.**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Texas Gulf Coast Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install velocity tubing strings (10 years)

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of velocity strings installed in the wellbore. A smaller inner diameter pipe is installed in the wellbore, causing an increase in the velocity of the fluids resulting in wells remaining unloaded without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **46 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **430,560 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 3,013,920**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue the use of Velocity Tubing Strings**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Install velocity tubing strings (10 years)

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of velocity strings installed in the wellbore. A smaller inner diameter pipe is installed in the wellbore, causing an increase in the velocity of the fluids resulting in wells remaining unloaded without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **29 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **271,440 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 1,900,080**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: _____

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Texas Gulf Coast Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Installing plunger lift systems at gas wells (10 years) ✓

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of a plunger lift installed in the wellbore. The well is put on an intermittent timer that cycles on and off allowing the plunger to mechanically unload the well without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **20 units** ✓

D. Methane Emissions Reduction

Methane Emissions Reduction: **187,200 Mcf/year**

Basis for the emissions reduction estimate: **Other** ✓

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 1,310,400**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue to sue pluanger lifts wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Installing plunger lift systems at gas wells (10 years)

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of a plunger lift installed in the wellbore. The well is put on an intermittent timer that cycles on and off allowing the plunger to mechanically unload the well without venting to the atmosphere.

C. Level of Implementation

Number of units installed: **62 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **580,320 Mcf/year**

Basis for the emissions reduction estimate: _____

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 4,062,240**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue to use plunger lifts wherever feasible.**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Gulf of Mexico Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Installing VRUs on crude oil storage tanks (10 years) ✓

Please describe how your company implemented this PRO:

Vapor recovery units on condensate tanks at offshore playforms and onshore production locations

C. Level of Implementation

Number of units installed: **3 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **93,620 Mcf/year** ✓

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 655,340**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso expects to continue to operate these VRUs**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Solar powered chemical pumps

Convert gas-driven chemical pumps to electric, mechanical, or solar pumps.

Please describe how your company implemented this PRO:

El Paso E & P has installed solar powered chemical pumps for downhole chemical injection

C. Level of Implementation

D. Methane Emissions Reduction

Methane Emissions Reduction: **50,188 Mcf/year** ✓

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): **$** _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 351,316**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso intends to continue to use solar powered chemical pumps wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Texas Gulf Coast Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Use foaming agents ✓

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of foaming agents injected through capillary strings that are installed in gas production wells with low bottom-hole pressure.

C. Level of Implementation

Number of units installed: **43 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **402,480 Mcf/year** ✓

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 2,817,360**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P intends to continue the use of foaming agents**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

BMP3: Partner Reported Opportunities (PROs)

Current Year Activities

A. Facility/location identifier information:

Central Onshore Division

B. Description of PRO

Please specify the technology or practice that was implemented:

Use foaming agents

Please describe how your company implemented this PRO:

When the gas flow velocity is not sufficient to lift reservoir liquids, the liquids will choke gas flow requiring a well blowdown to the atmosphere to expel liquids and restore gas production. Reducing the methane emissions associated with frequent well blowdowns can be alleviated through the use of foaming agents injected through capillary strings that are installed in gas production wells with low bottom-hole pressure.

C. Level of Implementation

Number of units installed: **186 units**

D. Methane Emissions Reduction

Methane Emissions Reduction: **1,740,960 Mcf/year**

Basis for the emissions reduction estimate: **Other**

E. Are these emissions reductions a one-year reduction or a multi-year reduction?

One-year ✓ Multi-year

If Multi-year:

Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration.

✓ Partner will report this activity annually up to allowed sunset date.

F. Cost Summary
Estimated cost of implementing the PRO (including equipment and labor): $ _____

G. Total Value of Gas Saved
Value of Gas Saved: **$ 12,186,720**
$ / Mcf used: **$ 7.00**

H. Planned Future Activities
To what extent do you expect to implement this PRO next year?: **El Paso E & P Intends to continue to use foaming agents and soap sticks wherever feasible**

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * ($)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved ($)

* Total cost of practice/activity (including equipment and labor)

Additional Comments

El Paso E & P Company, L.P.
Additional Accomplishments

elpaso Exploration & Production

El Paso E & P Company, L.P.
Natural Gas STAR Implementation Plan
Production Sector
December 2007

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El Paso E & P Company, L.P. (EPEP) is pleased to submit this Natural Gas STAR Implementation Plan. EPEP owns and operates natural gas and oil production wells and facilities in twelve states and the Gulf of Mexico. This document describes the technologies and practices EPEP currently uses to reduce methane emissions from our domestic production operations as well as the technologies and practices proposed to be used in the future. EPEP's past accomplishments and plan for the future includes technologies and practices consistent with existing Gas STAR Best Management Practices (BMPs) and Partner Reported Opportunities (PROs) such as vapor recovery units, gas lift technology, and electric compressors, to name a few.

EPEP's methane emission reduction activities also include special projects not specifically identified as BMPs or PROs in the Gas STAR Program. These are described more fully in this Natural Gas STAR Implementation Plan.

ELEMENT 1 Best Management Practices (BMPs)

Identify and replace high-bleed pneumatic device

There has been increased interest in several EPEP production regions in replacing existing gas driven pneumatic control systems with solar powered compressed air pneumatic systems. Tests have been performed in our ARKLATX region and plans already exist to install solar powered compressed air systems on selected platforms in the Gulf of Mexico. In 2008, the Gas STAR Team will support these efforts by helping to identify cost-effective equipment and locations where replacement of high bleed gas driven pneumatics devices would result in significant cost-effective methane emission reductions.

Install flash tank separators on glycol dehydrators

EPEP uses flash tank separators on glycol dehydrators at selected locations. In 2008, an effort will be initiated to inventory these installations and quantify their continuing methane emission reductions. In addition, these data will be used to identify additional potential cost-effective applications of flash tank separators on our glycol dehydrators.

Directed Inspection & Maintenance

EPEP tested two infrared methane detection technologies as part of our preparation of this Implementation Plan. As a result of these tests, EPEP has acquired an infrared camera and will use the camera throughout EPEP's operations to facilitate maintenance activities by efficiently identifying methane releases. EPEP believes that a Directed Inspection & Maintenance program using infrared technology is a Best Management Practice for the Natural Gas STAR Program Production Sector.

ELEMENT 2 Partner Reported Opportunities

EPEP has implemented several Partner Reported Opportunities in the past and will continue to implement and report the resulting methane emission reductions. As shown under "Element 3 Inventory of Past Reduction" these include:

Green Completions
Gas Lift Systems
Plunger Lift Systems
Vapor Recovery Units
Velocity Tubing Strings
Foaming Agents/Soap Sticks
Electric Compressors

Many of these represent continuing emission reductions such as Vapor Recovery Units and Electric Compressors that will be reported every year. Some are single event emission reductions that will be reported only in the year in which they occur such as Green Completions. In 2008, EPEP will continue to inventory Partner Reported Opportunities already implemented.

ELEMENT 3 Inventory of Past Reductions

EPEP began an inventory of past methane emission reductions for the years 2004, 2005, and 2006 as part of the preparation of this Implementation Plan. These past reductions include Partner Reported Opportunities as well as special projects not specifically identified as Partner Reported Opportunities or Best Management Practices in the Natural Gas STAR Program.

The Partner Reported Opportunities included in the inventory are:

Green Completions
Gas Lift Systems
Plunger Lift Systems
Vapor Recovery Units
Velocity Tubing Strings
Foaming Agents/Soap Strings
Electric Compressors

The special projects implemented by EPEP that resulted in significant methane emission reductions include a coal bed methane program and a pipeline leak detection and repair program. The coal bed methane program represents a reportable Gas STAR emission reduction because:

1. The methane gas is extracted from a coal seam that is actively mined. Only the production from those wells placed within the approved mine plan is reported here.
2. The wells are drilled by EPEP, all production activity is performed by EPEP, and all production equipment is owned by EPEP or rented directly by EPEP.
3. The methane gas extracted is owned by EPEP.

Since 2004, EPEP has implemented a program to proactively identify and repair leaks in the natural gas gathering system in one of our production fields with long gathering lines. Estimates of the methane that would be released if the repairs were not completed are compiled monthly.

A summary of the past emission reductions from both Partner Reported Opportunities and special projects is shown on Table 1.

not DOT ~~regulated~~ regulated lines

Past reductions

Table 1
Summary of Past Methane Emission Reductions

Past reductions - IM wants to report everything annually - no roll up.

all values Mcf/yr

	2004	2005	2006
Partner Reported Opportunities			
Green Completions	327,500	239,500	481,000
Install Gas Lift Valves	318,200	252,700	187,200
Install Plunger Lift Systems	533,500	402,500	290,160
Install Vapor Recovery Units	429,600	269,000	165,200
Install Velocity Tubing Strings	46,800	18,700	37,400
Use Foaming Agents/Soap Sticks	18,700	46,800	486,700
Install Electric Compressors	57,200	57,200	57,200
Special Projects			
Coal Bed Methane	4,703,400	3,920,500	3,470,700
Pipeline Leak Detection and Repair - 1 year	13,200	126,700	173,400
TOTAL	6,448,100	5,333,600	5,349,000

Gas STAR doesn't count this activity

How many did you do?

EPEP certifying their inventory this year

report everything each year.